

vascular risk factors used in the economic model. A Markov decision-analytic model using the Monte-Carlo simulation was employed to examine cost-effectiveness. Hypothetical patients were subject to risk of type 2 diabetes, CVD and stroke. Diabetic patients were at added risk of amputation, blindness and renal failure. Simulation of events was performed using the Framingham Heart Study and the UK Prospective Diabetes Study. **RESULTS:** Significant clinical benefits were demonstrated with sibutramine and diet/exercise compared with diet/exercise alone: proportion of patients achieving $\geq 5\%$ weight loss (51.6 vs 22.3% respectively; $p < 0.0001$), BMI (-1.65 [$-1.97, -1.34$] kg/m^2 ; $p < 0.0005$), absolute weight (-3.84 [$-5.18, -2.49$] kg ; $p < 0.0005$), HDL (4.07 [$1.50, 6.65$] mmol/L ; $p = 0.002$) and triglycerides (-12.17 [$-21.82, -2.52$]; $p = 0.013$). Small increases in blood pressure ($1-3$ mmHg) and heart rate ($4-5$ beats/minute) were observed. Sibutramine was a cost-effective addition to diet/exercise (approximately AUD\$40,000 per additional QALY). Sensitivity analyses demonstrated the model to be robust. **CONCLUSIONS:** Sibutramine is a safe, effective, and cost-effective intervention in the prevention of obesity-related complications through weight loss and weight maintenance.

POB6

IN EUROPE, HOW REPRESENTATIVE ARE OVERWEIGHT/OBESE SUBJECTS RECRUITED VIA THE INTERNET?

Zhou X¹, Radigue C², Allshouse AA³, Gilsenan A¹

¹RTI Health Solutions, Raleigh, NC, USA, ²Sanofi Synthelabo Recherche, Paris, France, ³RTI Health Solutions, North Carolina, NC, USA

For observational studies derived from Internet based cohorts, the representativeness of demographic, behavioral and health characteristics of subjects is not well-established in European countries. **OBJECTIVES:** To compare distributions of self-reported characteristics of subjects recruited via Internet in Germany & UK to a national representative sample in each country. **METHODS:** PROCEED is a multinational observational cohort of overweight & obese subjects (body mass index $>25 \text{ kg/m}^2$) recruited through an existing Internet panel in Germany & the UK in 2005. Eligibility criteria were: age 35–75; not pregnant; willing to lose weight in the next year and weight $< 180 \text{ kg}$. Recruitment was stratified to balance gender and overweight and obese categories. Baseline demographics and selected health and behavior characteristics of the PROCEED cohort were compared with estimates from a relevant subset (same age, BMI and not pregnant) of two National Surveys (1998 GNHIS and 2003 HSE). PROCEED data were standardized for gender and BMI category in each of the national surveys. **RESULTS:** PROCEED subjects in Germany ($n = 203$) and the UK ($n = 216$) presented similar characteristics to each national survey population in terms of level of alcohol consumption, and prevalence of hypertension, high cholesterol and diabetes. More PROCEED subjects reported having college or higher education (22% versus 12% in Germany; 31% versus 15% in the UK). PROCEED subjects were also more likely to be single. The German PROCEED cohort had a higher proportion of current smokers compared to GNHIS data (48% versus 24%) while the UK PROCEED cohort was very similar to HSE data. **CONCLUSIONS:** Despite few differences in education level, marital and smoking status, most demographic and health characteristics were similar between the Internet cohort of overweight/obese subjects and the German and UK national surveys. The internet seems to be an appropriate tool for recruiting subjects in observational studies.

POB7

THE RELATIONSHIP BETWEEN WEIGHT CHANGES AND RELATED CHANGES IN HEALTH-RELATED UTILITY: EVIDENCE OF CAUSE AND AFFECT

Woehl A, Currie CJ

Cardiff University, Cardiff, UK

OBJECTIVES: The objective was to examine the relationship between changes in body weight and determine if there was causal association with corresponding changes in health-related utility measured by EQ5D_{index}. **METHODS:** Data were extracted from the Health Outcomes Data Repository (HODaR). Data from subjects with multiple surveys were included. Analyses were conducted to determine the relationship between changes in weight and associated change in utility; overall and for different age, sex, body mass index (BMI) and disease groups. **RESULTS:** The total number of patients included was 8,286. The mean number of completed questionnaires was 2.25. The mean time between questionnaires was 500 days (inter-quartile range [IQR], 1120). The mean weight change was -0.027 kg (IQR = 5 kg). Weight did not change in 19.8% of men and 18.3% of women. For men and women, respectively, weight changed more than 3 kg in 35.3% and 37.6%, more than 5 kg in 22.2% and 23.2% and more than 10 kg in 5.9% and 5.7%. An association between health utility and weight gain could only be verified in high BMI groups (obese class I–III; i.e. BMI $> 30 \text{ kg/m}^2$) with high weight gain (5 kg, 10 kg). In these categories in men health utility decreased between 0.058 units (weight gain $>5 \text{ kg}$, obese I) and 0.590 units (weight gain $>10 \text{ kg}$, obese I) in comparison to -0.006 (weight change up to 5 kg, obese I) and -0.092 (weight change up to 5 kg, obese III) for patients with lower weight change. In women these values varied between 0.025 units (weight gain $>5 \text{ kg}$, obese II) and 0.060 (weight gain $>10 \text{ kg}$, obese II) and -0.001 (weight change up to 5 kg, obese II) and 0.017 (weight change up to 10 kg, obese I). **CONCLUSION:** A negative relationship between weight gain and health utility was verified. This relationship depended on the initial weight and the magnitude of weight change.

POB8

THE IMPACT OF BODY WEIGHT ON UTILITY SCORES IN PATIENTS WITH TYPE 2 DIABETES

Dennett SL¹, Secnik K², Yurgin NR², McDonald-Everett CM²

¹Strategic Health Outcomes, Carmel, IN, USA, ²Eli Lilly and Company, Indianapolis, IN, USA

OBJECTIVES: Weight gain is a common side effect of many therapies for type 2 diabetes (T2DM). This study reviews the medical literature to summarize the consequences of weight gain on health-related quality of life. **METHODS:** A review of the medical literature, including MEDLINE, EMBASE, PsycINFO, and abstracts from professional conferences, was conducted to identify studies assessing the impact of body weight on patient utility. Similarities and differences in study methodology and results were evaluated. **RESULTS:** Seventeen papers presented either: a) utility values by BMI or body weight or b) the change in utility scores or QALYs based on unit changes in BMI or body weight. Regardless of the patient population or methodology used to elicit utility scores, all studies reviewed found as body weight increased, patient utility decreased. Utility scores obtained using standard gamble techniques were generally higher than those using Time Trade Off or the EQ-5D. Most studies evaluated utility scores stratified by body weight or BMI and used regression analyses to attribute the difference in utility scores to differences in weight while controlling for other factors. Two studies used standard gamble methodology to evaluate the change in utility scores by asking patients to evaluate the impact of specific amounts of weight gain or loss. Studies generally